

# Work Order ID 52625

October 5, 2009 8:24:32 AM



Page 1

Item ID: D206-667-201TRN

Accept



Setup Start



Revision ID: C

Stop



Item Name: Crosstube Turning Detail

Start Date: 05/10/2009 Start Qty: 1.00



Cust Item ID:

Required Date: 20/10/2009 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: RL Date: 09-10-5 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D206-667-241	Rev C								
100		0.00							
	MORI SEIKI CNC LATHE LARGE								
Mori Seiki	Memo	0.00							
Mori Seiki CNC Lathe Large	1-Fill tube with sand & install plugs DT8534 on both ends as per Folio FA084□2-Turn first side as per Folio FA084□3-File down transition lines smooth.								
110		0.00							
	QC1- Inspect dimensions to dimension sheet								
QC	Memo	0.00							
Quality Control									
120		0.00							
	MORI SEIKI CNC LATHE LARGE								
Mori Seiki	Memo	0.00							
Mori Seiki CNC Lathe Large	1-Turn second side as per Folio FA084□2-File down transition lines smooth. □ 3-Remove sand and plugs								

Am 09-10-08①

Am 09-10-08①

Am 09-10-08①

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Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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130

QC1- Inspect dimensions to dimension sheet

0.00



QC

Memo

0.00

Quality Control

a.m 09 - 10 - 08 ①

140

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

1 / 0 - 10 - 08 ①

150

Crosstubes Chemical Conversion

0.00



HandFXtube

Memo

0.00

Hand Finishing Crosstubes

a.m 09 - 10 - 08 ①

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Item ID: D206-667-201TRN

Accept



Setup Start



Revision ID: C

Stop



Item Name: Crosstube Turning Detail

Start Date: 05/10/2009 Start Qty: 1.00



Cust Item ID:

Required Date: 20/10/2009 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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160

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

*DP 9-10-8*

170

Packaging

0.00



Packaging

Memo

0.00

Packaging

Identify and Stock in kanban rack ☐ Location: *86**Am 09-10-08*

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

*09/10/13**MF 09-10-08*

# Picklist Print

October 5, 2009 8:24:32 AM

Page 1

Work Order ID: 52625

Parent Item: D206-667-201TRNRevC

Parent Item Name: Crosstube Turning Detail


Start Date: 05/10/2009

Required Date: 20/10/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D6003-102RevA		Manufactured	No			110	Each	62.0000	1.0000			
												
Crosstube, 206												

Q.m 09-10-08 ①

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
LG	62	
29116	11	
38335	51	

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	52625
<b>Description:</b> Crosstube Assembly		<b>Part Number:</b>	D206-667-241
<b>Inspection Dwg:</b> D206-667-241 <b>Rev:</b> C		<b>Page 1 of 1</b>	

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article
 ☐ Prototype

Inspection Sheet Drawing Dimension		Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
SIDE A	30° x 0.500	+/-0.010	30° x 0.500	/			
	0.250	+/-0.010	0.250	/			
	2.240	+0.005/-0.000	2.245	/			
	4.438	+/-0.030	4.438	/			
	1.780	+0.005/-0.000	1.785	/			
	R0.063	+/-0.010	R0.063	/			
	1.851	+0.005/-0.000	1.856	/			
	1.928	+0.005/-0.000	1.932	/			
	2.005	+0.005/-0.000	2.008	/			
	2.082	+0.005/-0.000	2.086	/			
	2.159	+0.005/-0.000	2.163	/			
	2.190	+0.005/-0.000	2.194	/			
SIDE B	30° x 0.500	+/-0.010	30° x 0.500	/			
	0.250	+/-0.010	0.250	/			
	2.240	+0.005/-0.000	2.250	/			
	4.438	+/-0.030	4.438	/			
	1.780	+0.005/-0.000	1.785	/			
	R0.063	+/-0.010	R0.063	/			
	1.851	+0.005/-0.000	1.856	/			
	1.928	+0.005/-0.000	1.932	/			
	2.005	+0.005/-0.000	2.008	/			
	2.082	+0.005/-0.000	2.086	/			
	2.159	+0.005/-0.000	2.164	/			
	2.190	+0.005/-0.000	2.194	/			
	100.60	+/-0.020	100.620	/			

<b>Measured by:</b>	A.M	<b>Audited by:</b>	AWM	<b>Prototype Approval:</b>	N/A
<b>Date:</b>	09-10-08	<b>Date:</b>	9-10-08	<b>Date:</b>	N/A

Rev	Date	Change	Revised by	Approved
A	06.10.16	New Issue (P/O D206-667-201)	KJ/JLM	
B	09.05.20	Dwg Rev updated	KJ	

Item	Qty -241	Part Number	Description
1	X	D206-667-241	CROSSTUBE ASSEMBLY (206B HIGH AFT)
2	1	D6003-102	CROSSTUBE
3	2	D2891-1	SUPPORT
4	4	D3595-063-395	RUBBER CUSHION
5	4	MS21920-20	CLAMP (OR MS21920-21)
6	A/R	MAGNOBOND 6398	ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299-947-100, TYPE II, CLASS 2 ADHESIVE)

# **GENERAL NOTES:**

- 1) MATERIAL: MANUFACTURED FROM D6003-102  
FINISHED LENGTH = 100.60±0.020
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2  
PAINT OUTSIDE PER DART QSI 005 4.2
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- 6) IDENTIFICATION: SCRIBE DART PART NUMBER "D206-667-241" AND BATCH NUMBER ON INSIDE OF CUFF USING VIBRATING STYLUS.
- 7) WEIGHT: 22.5 lbs
- 8) PART IS SYMMETRIC ABOUT CENTERLINE.
- 9) RUN CUTTER OFF PART WHERE INDICATED. BLEND OUT EDGE LONGITUDINALLY, TRANSITION SHOULD BE SMOOTH.
- 10) BEND PROGRESSIVELY WITH A MINIMUM OF 12 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D.
- 11) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 12) INSTALL D2891-1 SUPPORT USING 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 PER QSI 015. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- 13) INSTALL MS21920-20 CLAMPS (OR -21) WITH D3595-063-395 RUBBER CUSHIONS TO SECURE THE D2891-1 SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMPS MECHANISMS ARE LOCATED ON CROSSTUBE CLAMPS.
- 14) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS ARE SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.

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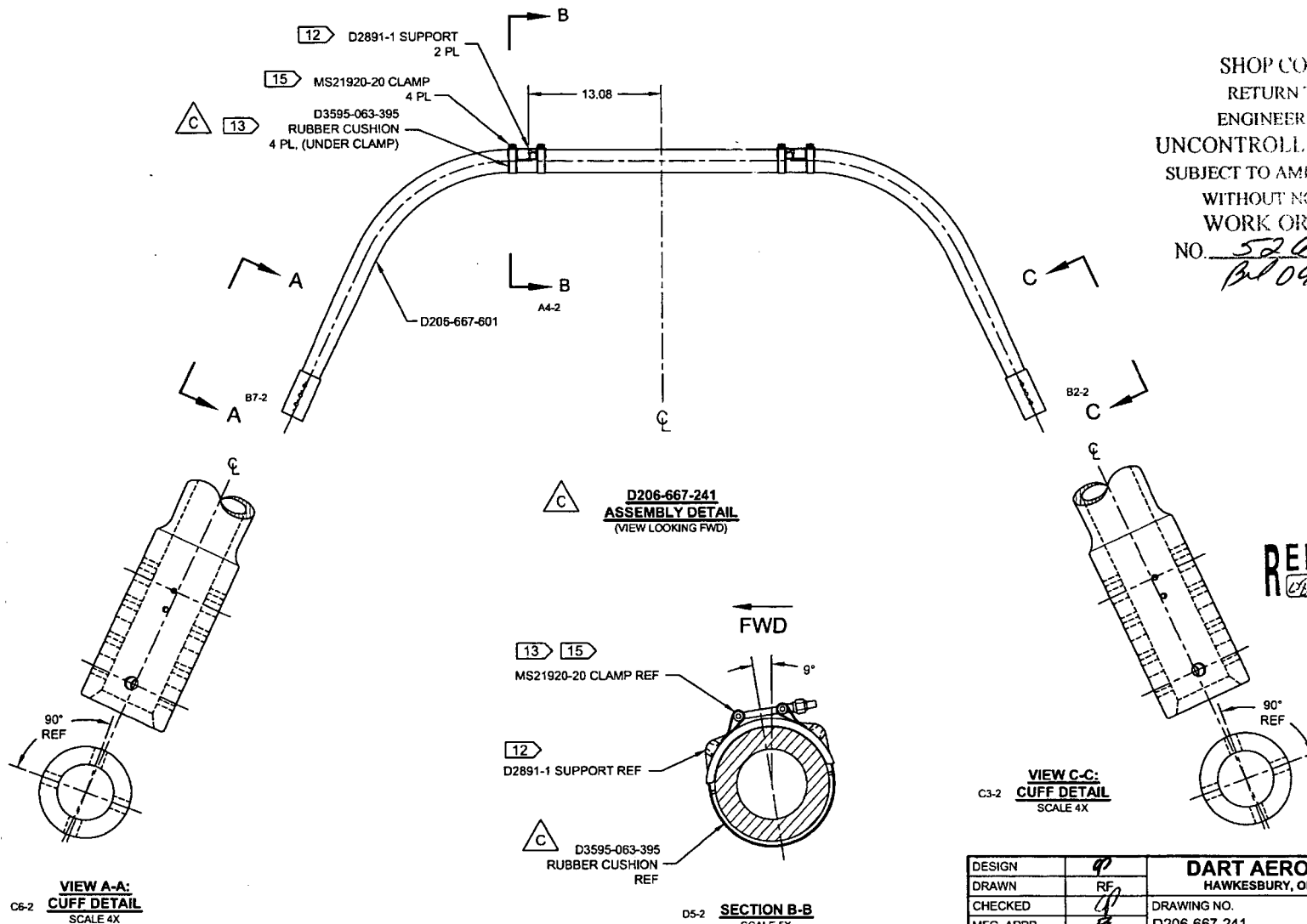
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*BL 09-10-5*

**RELEASED**  
*08/11/12*

C	REFORMAT/REVISE GENERAL NOTES/PART LIST (ZN 07-1); REORGANIZED VIEWS AND REFORMATTED DRAWING TO CURRENT STANDARDS. D3595-063-395 WAS D2856-400-694 (ZN D6-2 & A5-2); REMOVED REF. & ADD TOLERANCES (ZN C5-3, C4-3, D3-3); RELOCATED FLAG #6 (ZN A7-3) PER NCR 210; MOVED TURNING DETAIL & UPDATED TOLERANCE TO SHEET 4.	RF	08.11.06
B	ADD HOLES FOR COMPATABILITY WITH BHT/AA SKIDTUBES	PH	05.02.04
A	NEW ISSUE	CP	00.11.17
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>9P</i>	<b>DART AEROSPACE LTD</b>	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>JP</i>	DRAWING NO.	REV. C
MFG. APPR.	<i>JP</i>	D206-667-241	SHEET 1 OF 4
APPROVED	<i>JP</i>	TITLE	SCALE
DE APPR.	<i>JP</i>	CROSSTUBE ASSY (206B HIGH AFT)	NTS
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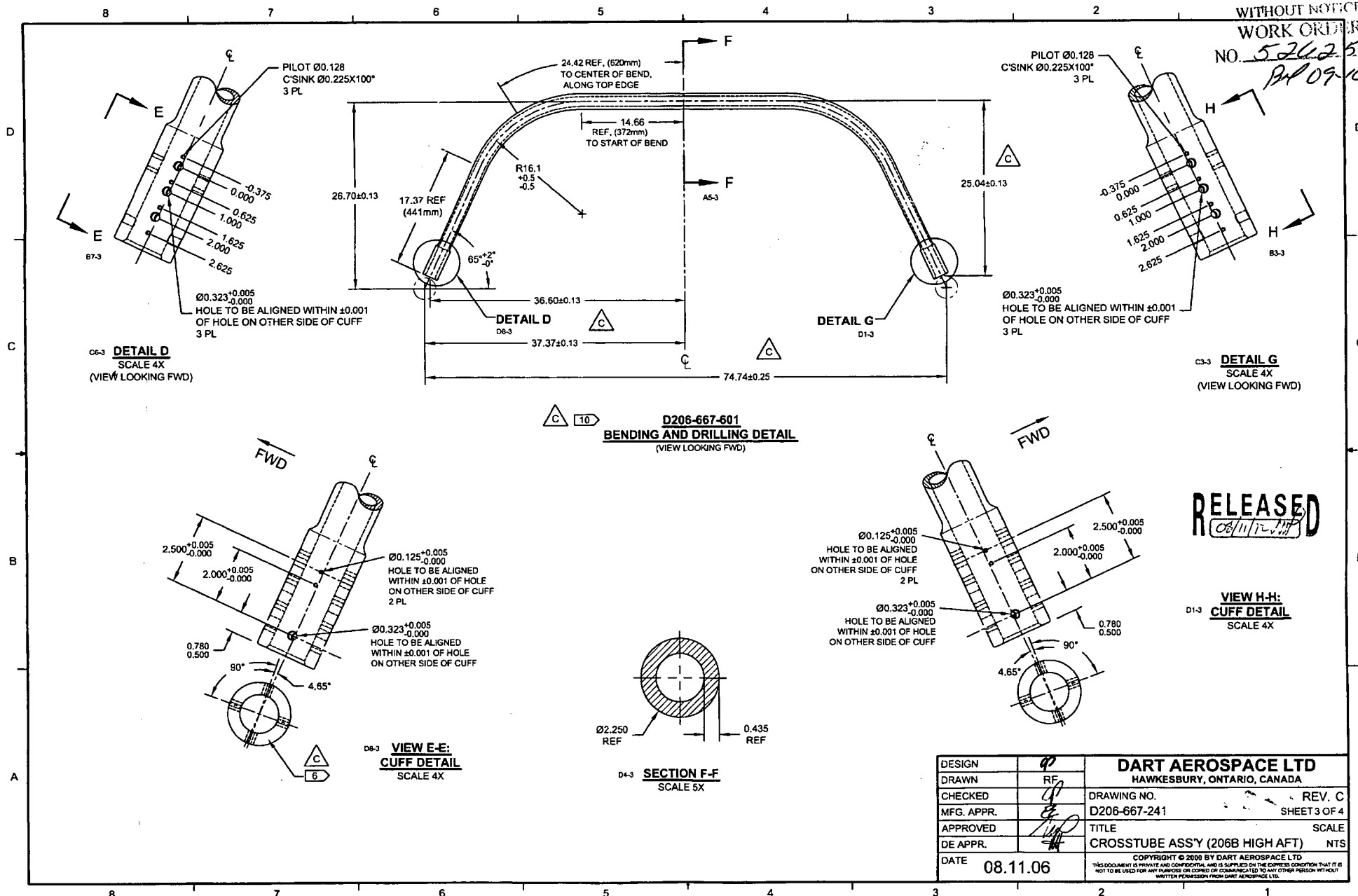
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MFG. APPR.	8	D206-667-241	SHEET 2 OF 4
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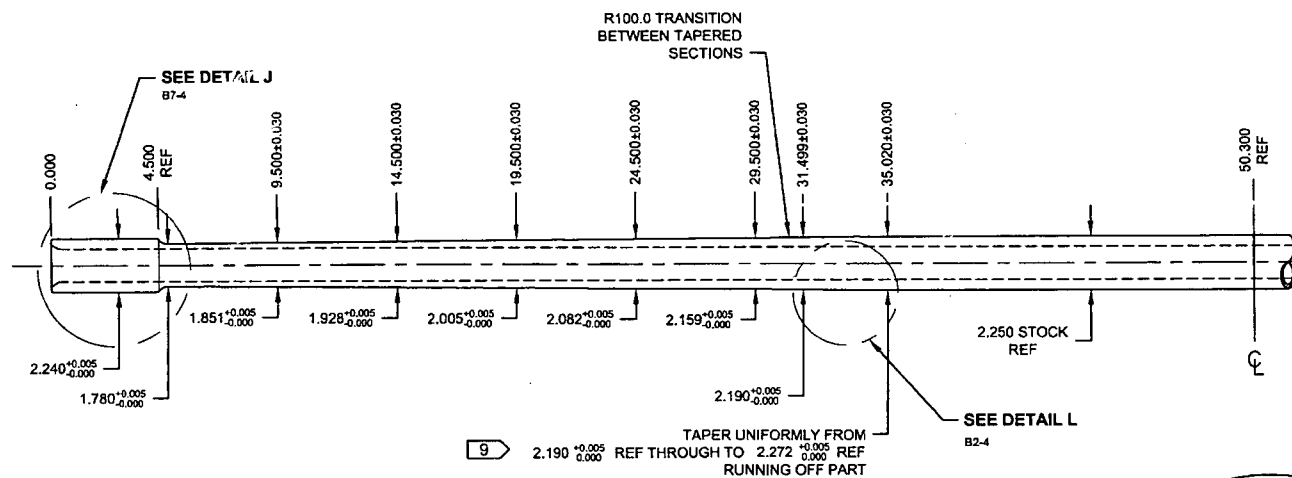
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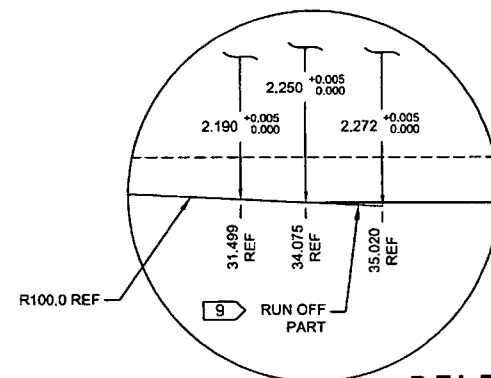
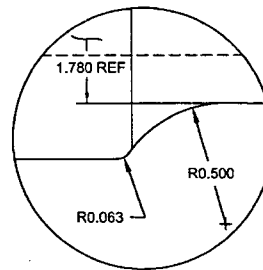
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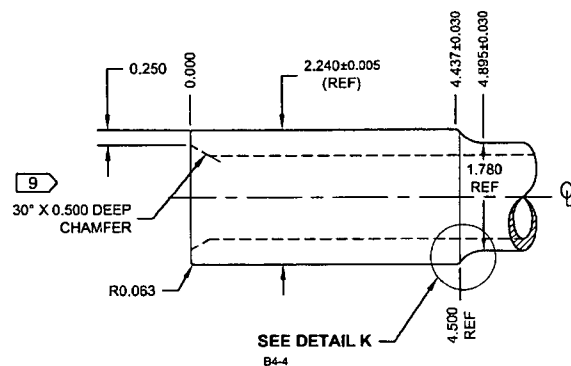


**TURNING DETAIL**



**DETAIL L:**  
 TAPER RUN-OFF  
 NOT TO SCALE

**RELEASED**  
 06/11/12



**DETAIL J:**  
 CROSSTUBE CUFF  
 NOT TO SCALE

**DETAIL K:**  
 CUFF TRANSITION  
 NOT TO SCALE

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